

IOWA CONSERVATIONIST

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HOW ANIMALS LIVE IN WINTER

1950 HUNTING AS SEEN BY THE WARDENS

An excellent over-all picture of the various hunting seasons is secured through questionnaires completed by the state conservation officers. These men, 53 in 99 counties, are in the field each day during the open seasons checking hunters' bags, listening to their bragging and their gripes, and as a result know better than anyone else the general conditions as they existed during the various seasons.

Compilation of questionnaires recently received reveals that Iowans had a much better than average hunting season except for ducks. The questionnaire covered Iowa's "big five", pheasants, quail, ducks, squirrels and rabbits.

The key questions asked for each of the game animals were: "How was hunting success in your territory? Good, fair or poor?" and "How was it compared to 1949? Better, poorer or the same?"

The answers are not to be confused with a game census or game population figures, rather they show how successful hunters were in securing game. This difference can be illustrated by the pheasant season. Pheasant populations were high, yet hunting success was poorer than the previous year.

Reports on pheasant hunting success show: good, 26 counties; fair, 47 counties; poor, nine counties. Compared to 1949: better in 28 counties, poorer in 43 counties, the same in six counties.

Duck hunting success was reported good in six counties, fair in 23, poor in 69. Compared to 1949, better in 25, poorer in 70, the same in three.

Squirrel hunting was probably the most successful of the 1950 game seasons. In only two counties in the state was squirrel hunting considered poor. The questionnaires reported: good, 74 counties; fair, 22; poor, 2. Compared to 1949:

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Jim Sherman Photo.

In winter under the protective cover of the ice behind his dam, the beaver swims and eats, undisturbed by snow and zero winds.

IOWA'S POISONOUS SNAKES

By Robert B. Moorman
and Kenneth D. Carlander
Iowa State College

Whenever snakes are the subject of conversation, the talk is apt to turn to the poisonous ones. Many different and varying opinions are then forthcoming as to how many kinds of poisonous snakes there are in Iowa, where they are found, and how numerous they are in those counties where they are "common."

Carefully kept records and actual specimens indicate that there are four different kinds of poisonous snakes in our state. These are the copperhead (*Agkistrodon m. mokasen*), and three members of the rattlesnake group, the massasauga or swamp rattlesnake (*Sistrurus c. catenatus*), the prairie rattlesnake (*Crotalus v. viridis*) and the timber rattlesnake (*Crotalus h. horridus*.)

It is often rumored that one other poisonous snake, the cotton-

mouth or water moccasin (*Agkistrodon piscivorus*) occurs in Iowa. However, no actual specimens have ever been offered in evidence. On the basis of known records the cottonmouth does not approach Iowa's southern border by several hundred miles. The common water snake, a non-poisonous species, is commonly called the water moccasin in various parts of the state and has given rise to the belief that the poisonous species is present in the state.

One of our perfectly harmless snakes is believed by many people to be poisonous. This snake, the hog-nosed snake, is usually called "puff-adder", "blowing viper", "spreading adder", and other dreadful names by those who think it poisonous. This interesting snake has been discussed in a previous article.

As almost everyone knows, our poisonous snakes possess two long and hollow fangs—actually teeth

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By Richard L. Weaver

Condensed from *Audubon Nature Bulletin*

Nature has provided many ways for animals to spend the winter months. To study them in winter, one must know where and when to expect them, what stage they will be in, and how active they will be.

Most birds migrate southward. Some go a few hundred miles. Others travel as far as Central and South America.

The monarch butterfly goes south in large flocks in the fall, many never to return again.

Some animals migrate in other directions than north and south and often over very limited areas. A few birds, such as the evening grosbeaks, the canvasback and redhead ducks, cross the country from west to east and back annually. Chickadees move from wooded areas to more open and often more domesticated areas each winter.

In ponds and lakes many fishes swim out to deeper waters in the fall and return to the shallows in the spring.

As winter approaches, insects, spiders, snails and other invertebrates, and amphibians move from the tops of trees, shrubs and weeds to lower spots, from standing vegetation to ground litter, from land to water, or deeper in the soil or to deeper water.

Any movement to and from an area which occurs regularly as the seasons change is called a migration.

Many animals hibernate or sleep during the winter, but not all animals that sleep during part of the winter are true hibernators. If the animal is inactive, with a slowdown of heartbeat, breathing and digestion, and the body temperature is close to that of the surroundings, the animal can be said to be in true hibernation.

The true mammal hibernators are ground squirrels, woodchucks, bats and jumping mice. Others such as the bear, skunk, raccoon, badger and opossum sleep for part

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CLUB TEACHES SAFETY AND CONSERVATION

Fifteen boys at the Sibley High School are learning the rudiments of safety and conservation in outdoor sports this year under the tutoring of Norman Weis, instructor for the Outdoor Sporting Education Club.

Designed to provide spare-time activities and hobbies for boys after they leave high school, the club was organized in September and now meets every Tuesday in Weis' science room, the eighth period and after school on Thursday.

Classified only as an "extra-curricular" activity, the club's purpose is to "give students not out for athletics or interested in music some information and interest in an activity which can be useful not only right now but after they get out of school and in later life."

Under the heading "General Conservation of Wildlife," the boys have already discussed such things as preservation of game animals, control of pests, and methods and laws of this state and the whole country.

Also included in the instruction, according to Weis' lengthy outline which is designed to cover the whole year, are care and types of rifles and shotguns, ammunition, nomenclature, handling and safety, shooting positions, sightings, ballistics, and the habits and methods of hunting squirrel, gopher, woodchuck, coon and rabbit.

The boys have already made one field trip on which they managed to bag five pheasants in less than one hour. This trip was made near the Attig farm on Nov. 14, and special emphasis was put on instruction in the art of safe and proper fence crossing and gun carrying.

This week in class the boys are in the midst of learning about shotguns, trap shooting, field shooting, patterning, habits and methods of hunting ducks, pheasants and crows, and game laws concerning them.

In regard to patterning, the boys

PHEASANTS' I.Q. HIGHER EACH YEAR

We people who live in the center of the pheasant hunting area have a unique opportunity to watch the habits of these popular birds. Most hunters will agree that they are becoming smarter every year. While they may not be able to read the calendar, and are caught napping November 11, the wary ringnecks are quick to adjust. This year especially, with early season hunters wading through heavy cover in fields of unpicked corn, the roosters would run ahead, hide, sidestep. Their best "play" is to wait quietly as the too anxious hunter hurries down the corn rows, then as he leans wearily on the fence in despair or lights up a cigarette for a moment's relaxation from "the kill," colorful Mr.

Cock flies away from behind. (Most farmers assert the average hunter walks far too fast in his anxious search for pheasant.)

Everyone was waiting for the first snow. It makes tracking easier, and the cold was certain to find them huddled in fence rows and in the sloughs. Most hunters on Thanksgiving Day walked ambitiously downwind, only to return soon to the car after facing its freezing blast.

The car, warm and cozy, is too great a temptation for road hunting, even though it means playing hide and seek with the law. Even the road hunters find the wanted bird as cautious as a crow. If the car stops, permitting the hunter

to step out and stalk him, the ringneck is gone with the wind.

Of course the best pheasants always get away after springing up under one's nose while the safety is on. And clouds of hens never fail to tantalize the hungry hunters on their worst days. Conservation officials agree that each year there are more and more hunters. Thanks to conservation clubs and friendly farmers, the population is great enough to keep most of the hunters happy. Important note: ask that farmer for permission to hunt before tramping all over his farm!—*Oelwein Register.*

SMARTEST GAME BIRD

Pheasants have proved themselves again the smartest game birds we have.

The first day out nearly everybody toting a shotgun kicked up birds reminiscent of the old days when every corn field and every "dredge" ditch had its quota. Beginning the next day, everything was suddenly different.

The spots that were so full of them on Saturday offered meager pickin's Sunday if any shooting at all. Thirty-minute limits on Saturday dragged into unrewarding, four-hour hikes on Sunday.

Shooters came in bone-weary, disappointed and disgruntled. When a stray rooster would get out, at long range, it was easy to miss due to over-eagerness or fatigue. This is the kind of shooting it's going to be the rest of the season, the hard kind.

The ability of the ringneck to adapt himself to heavily populated and heavily shot country is what makes him so valuable a game bird. The Chink hasn't survived in China all these centuries for nothing. He will be with us in numbers, more or less, until the end of time—and try to think of any other game bird that will.

From what we have seen out hunting, pheasants are a little thicker than a year ago but still far from as numerous as they were in the early 40's. You can't yet pick a field at random a mile or two from Emmetsburg, shoot your limit and be back at work within an hour. In the past it has been possible to do that, even with big limits, but then you could shoot a hen or two.

There is a substantial population of birds to hunt in Palo Alto County and the hunter has to use his head and have some luck to get into them. Calm zero days, following the storms, we have found ringnecks feeding in flat corn and sitting tight. This is when a pointing dog and the shooter have a field day.

During the storms the birds are usually in the heaviest cover. But on other days, when no storm has interfered, it takes expert guessing to locate them. They may be in the corn and they may be in the brush and they may run at the



The Outdoor Sporting Education Club of Sibley High School is designed to provide spare-time activities and hobbies for boys after they leave high school.

* * * * *

have also made a field trip to the airport where they were shown how to determine whether their gun is giving the correct shot pattern for certain kinds of hunting.

Equipment for the club, such as three .22 rifles; one 16 gauge shotgun; two outboard motors, one a cutaway model; three kinds of fishing rods and two kinds of reels, has been loaned by nationally known manufacturers for use during the school year.

This winter the boys will be given instruction on handguns, dogs, and outboard motors and some instruction on fishing in preparation for next spring's fishing season.

"When it starts getting warm next spring," Weis said, "we'll start getting the fishing rods and reels out and begin demonstration of

proper handling of this equipment."

But during the winter when they're not busy learning any of the above, the boys will be learning some more on conservation. Already plans are being formulated for building shelters for game birds.

Stressing the point that "we have and are planning to do considerable field instruction," Weis said that the primary aim of having the club, other than later life hobby acquisition, is to teach safety, particularly, and the proper use of equipment.

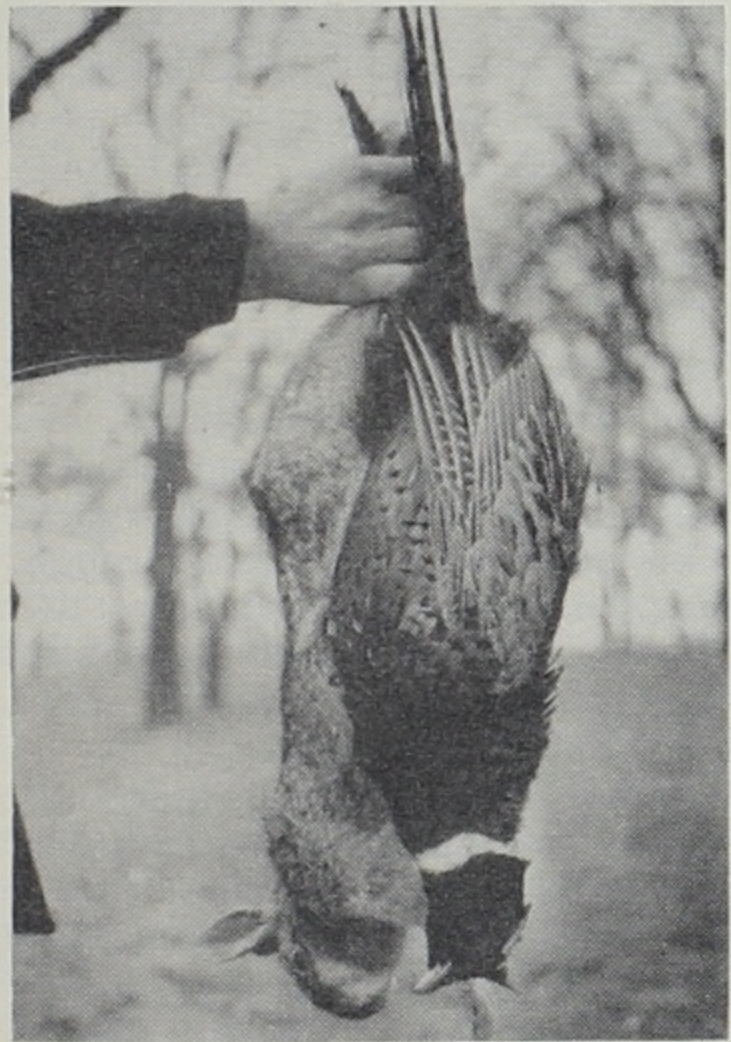
In this and also in connection with game laws and conservation, Weis said that they are cooperating with Game Warden Harold Brucklacher, who already has talked to the club several times.

Jim Sherman Photo.

snap of the first stalk, or stick tighter than wallpaper.

When it's that way, we have tried fast sampling of cornfields and cover, to try and find the best spots to hunt. We think (and you probably don't) it is easier for one or two shooters with a dog to go out and get a bird apiece or a limit apiece than for big squads to bag enough to go around.

After the hunting gets tricky, we like to turn our dog loose and let him decide where we will hunt. He has saved us miles of tramping and more often than not helped us find game. Our dog has at times led us into game in places we would never have looked into otherwise.—*Emmetsburg Reporter.*



Jim Sherman Photo. The pheasant crop was good and the bunnies have staged a comeback.

HUNTING HERE AT HOME

By and large, the Iowa hunter has not too much to complain about. Other than waterfowl gunning, which was very spotty, the 1950 autumnal season treated the Iowa nimrod in nice fashion. The pheasant crop was good, the quail crop was above average, and the bunnies have staged a comeback, and with some of the boys getting in good duck shooting you can't write off 1950 as being a bad year.

Few states had pheasant shooting comparable to that of Iowa this year. Both South and North Dakota washed out, Michigan was pretty good, parts of Minnesota and Nebraska had fine gunning, a very few spots in Wisconsin, but for depth of territory and length of season the crown goes to little old Iowa.

Many states top Iowa on quail, but that is only because Iowa is the bread basket of the U. S., with intensive agriculture and proper quail cover remaining only in a limited area.

If you Iowans want to know what good hunting you enjoyed, just talk to hunters from neighboring states. They think Iowans are mighty fortunate.—*The Nomad, Davenport Democrat.*

WHEN THE HUNTER RETURNS

Each pheasant season I am struck anew by the appalling helplessness of a man with one pheasant to be cleaned.

He comes to the kitchen door, bird in one hand, gun in the other, with an air of hail the conquering hero. We are expected to drop whatever we are doing and greet him with proper enthusiasm. We are expected to be as thrilled as though he had brought in a television set and a mink stole.

In the meantime, he is dripping snow and mud and the pheasant is dripping blood and feathers.

It is understood that he must not skin the bird. It has to be picked if I am expected to cook it. A skinned pheasant isn't any more appetizing than a skinned chicken would be.

Where's the teakettle? Funny thing, it's on the stove where it's been for the past 25 years. Would I fill it since his feet are dirty? Where's a pail? Somebody find a pail!

The pheasant is laid down on the breakfast chair; the gun is put in the dining room, the coats, cap and gloves are thrown in a corner and the overshoes are put wherever seems to be the best place at the moment.

The teakettle is boiling by now so the cortege repairs to the basement. The younger members of the family and any visiting neighbor boys and girls have to watch the picking even though they have seen the same thing many times.

When we hear the furnace door open and smell burning feathers we know the little party is ready to come back upstairs. The teakettle is usually left in the basement.

Where's a pan? What happened to that good knife of mine? After a few minutes—there it is. Nice bird, isn't he?



Jim Sherman Photo. "For this we maintain an arsenal, we frequent the sportsmen's shops, we have a roomful of outdoor clothing, and we house several dogs."



Jim Sherman Photo. Hunters in the Siouxland area will watch with interest what the United States Supreme Court does to the famous "favorite son" waterfowl law which bans non-residents from hunting ducks and geese in the Sunshine State.

WATERFOWL RULING APPEALED

Hunters in the Siouxland area, at least those living outside the state of South Dakota, will watch with interest what the United States supreme court does to the famous "favorite son" waterfowl law which bans non-residents from hunting ducks and geese in the Sunshine state.

James Kemp, Stevens Point, Wis., was arrested for shooting a goose near Chamberlain, S. D., in a test case, and prosecuted under the state law which bans out-of-

There he lies on the drainboard, one wing off and one leg hanging unnaturally at his side. For this we maintain an arsenal; we frequent the sportsmen's shops; we have a roomful of outdoor clothing, and we house several dogs.—*Mrs. Katharine Piper, Eldora Herald Ledger.*

state hunters from shooting waterfowl within South Dakota's borders. His conviction was upheld by the state supreme court. Now Mr. Kemp has appealed to the United States supreme court.

He maintains that the South Dakota statute violates article 4, section 2 of the constitution which states: "The citizens of each state shall be entitled to all the privileges and immunities of citizens of the several states." Mr. Kemp also cites migratory waterfowl agreements signed by Great Britain and the United States and by the U. S. and Mexico, and amendment 14 of the constitution which reads in part: "... no state shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States."

Aside from the interest of hunters from Iowa, Nebraska, Minnesota and other states, the Kemp case poses some intriguing legal questions dealing with the sovereign powers of state governments. When the constitution was written, many states were jealous of their rights and insisted that safeguards be written into the document to protect their prerogatives.

Yet the wording of the 14th amendment and the seemingly plain language used in article 4, section 2 would appear to give the Iowa or Nebraska hunter the right to shoot migratory birds in South Dakota. Despite those constitutional provisions, however, the South Dakota supreme court held the state was within its rights in denying outside hunters access to duck and geese shooting.

The supreme court's eventual ruling should provide some good reading for Siouxland regardless of which way the decision goes.—*Sioux City Tribune-Journal.*

It has been estimated that anglers catch 260,000,000 pounds of fish from the fresh waters of the United States annually.



Jim Sherman Photo.
Ever feed a flock of pigeons? You'll notice one thing about the birds. They never quarrel with one another about food and are different in this respect from most any other birds, animals or people.

NOWADAZE

By Charlie Gebhard

Nowadaze writers seem to coin all sorts of names for women. They're called femmes, chicks, wrens, quail, ladies, girls, misses, skirts, dolls, twists, shebas, packages, sugar-plums and pigeons.

Really when you stop to think about it, a girl who is called a "pigeon" ought to consider it a compliment, if everything we've observed about pigeons is considered. Pigeons have always fascinated us—the kind that fly, we mean.

Ever feed a flock of pigeons? You'll notice one remarkable thing about the birds—they never quarrel with one another about food. If a pigeon's neighbor picks up a crumb of bread, mister pigeon won't molest him and try to take it away, wherein he's considerably different from most any other birds, animals or people!

It's most amazing to note the actions of a homing pigeon when released from a box to find his way to his home several hundred or more miles away. The actions of these birds always fascinated us and we found out something about them this week that is extremely interesting.

It seems that science has now learned how the pigeon gets back home. These birds are equipped with an enormously sensitive navigation device that can determine small differences in the earth's magnetic field and the rate at which the earth's surface is turning. When the pigeon is turned loose miles away from his native haunts, he simply flies along the invisible beam of these subtle forces until he arrives at the familiar vibrations of his home loft. (What a wonderful gadget that would make for homebound husbands!)

Prof. Henry L. Yeagley, noted Pennsylvania scientist, asserts that the pigeon's optic nerve ends in a small, moundlike structure for

which zoologists have never been able to account but which is also believed to play an important part in the bird's navigation. Whatever the reason, many a pixilated alcoholic would give a lot to be able to find his way home as easily as a homing pigeon!

Ever notice how many thousands of the birds inhabit the loop business district in Chicago? They drink right out of the drinking fountains and walk on the side-

walks like pedestrians. Many of them will eat right out of your hand if you have a bit of patience with 'em. Funny how these animals prefer the city to the open country.

Don't spose there's a farmer who doesn't have pigeons for tenants in his barn. The birds can be obnoxious all right, and lots of 'em pay for their fun by ending up flat on their backs in a bowl of pigeon soup. The average hunter likes pigeons too. When he's been out squirrel, rabbit, pheasant or duck hunting all day and hasn't been able to shoot a thing, he's always got pigeons to fall back on.

Got talking to Carl Grawe about pigeons and he got to telling us about the passenger pigeons which were so numerous at one time in Iowa and the Mississippi Valley. He tells us that some of the old-timers like Ike Woodring often went out and shot as many as a hundred of the birds in a single day.

They were far too numerous, however, to have disappeared solely as a result of shooting on the part of hunters. Whatever happened to them isn't clear, but they simply vanished about 60 years ago and are now extinct. They were unusually large birds measuring about 16 inches in length.

We've heard all sorts of stories about passenger pigeons and also about the damage they were sup-

posed to have inflicted on crops, fruit, etc., years ago. We heard the same stories about the pheasants when they were introduced to the cornfields in Iowa. Fact of the matter probably is that no bird ever did much damage to anything. Perhaps if we had the pigeons back in their 19th century numbers and had all our other little feathered friends with us the same way, we wouldn't have to resort to DDT spraying and a lot of other bother to fight corn borers and other insects.

Anyway, if you think a column about pigeons makes dull and uninteresting reading, remember one thing! It's probably a lot cheaper to feed one of these feathered pigeons than it is to feed one of the skirted, unfeathered variety. Many a Waverly hubby probably wishes his little pigeon had been born with feathers! Incidentally that would eliminate charges of dolling 'em up!—*Waverly Democrat*.

DO SHOT TRAVEL?

Members of the "cold stove league," which is made up of the more enthusiastic hunters throughout the country, can always find matters pertaining to guns and ammunition about which to argue or, at least, converse.

"Yeah, I've read all those figures on muzzle velocities in terms of feet per second, but what I want is the dope in miles per hour. For instance, how fast does a charge of shot travel . . . in words a speed cop would use?" This is a familiar question to members of the sporting ammunition industry.

"When a 12 gauge Remington Express shot load, consisting of 1¼ ounce No. 6 chilled shot, leaves the muzzle, it is traveling at the rate of about 950 miles per hour," says Henry P. Davis, public relations manager, Remington Arms Company, Inc. "By the time it has gone 20 yards, it is whizzing along at about 650 miles per hour and at 40 yards it has slowed (?) down to about 525 miles per hour . . . which isn't exactly a crawling gait.

"The speed of other loads may be of interest. A Remington Shur Shot load, powder equivalent to 3¼ drams and 1½ ounce of No. 6 chilled shot, leaves the barrel at about 875 miles per hour; at 20 yards it is going nearly 640 miles per hour, and at 40 yards a little over 500 miles per hour.

"The standard Remington trap shooting load, 1½ ounce of No. 7½ chilled shot, is moving over 825 miles per hour when it leaves the muzzle, about 600 miles per hour at 20 yards distant and at 40 yards about 475 miles per hour.

"Skeet loads get out of the barrel at the rate of about 820 miles per hour and at 25 yards, due to the smaller shot (No. 9 chilled), the speed has diminished to around 540 miles an hour, which is still a bit faster than you can throw a rock.



Jim Sherman Photo.
"Don't suppose there's a farmer who doesn't have pigeons for tenants at his barn. The birds can be obnoxious all right, and lots of them pay for their fun by ending up flat on their backs in a bowl of pigeon soup."



For the first time in years fishing through the ice has been allowed after November 30. Perch fishing makes up the bulk of the catch during the winter months, although crappies, walleye pike and northerns are caught in some numbers.

PILOT PUNCHES

Owing to weather conditions, there has been a lull in the fishing season. However, some of the boys are figuring on going in for winter fishing this year in a big way. It will be the first time in years that fishing has been allowed through the ice after November 30. When the ice gets well established, we can expect to see some shelters used. Most of us will hang back and see what happens before we get too excited about the zero angling.

As an echo of the past few months of good fishing here, we pass on the report of one of our most proficient and consistent fishermen—Mrs. J. B. Paxton. Mrs. Paxton is a shore fisherman who has kept close track of her catch. She has pulled in the amazing total of 473 fish. The breakdown shows that this total includes 326 silver bass, 62 walleyes, 58 bullheads, 22 catfish, four crappies and one northern pike.

Mrs. Paxton caught 58 fish in May, 55 in June, 120 in July, 155 in August, 40 in September and 45 in October. Her best walleye fishing was in May and October and the silvers hit best in July and August. Her largest walleye weighed four and one-half pounds, largest catfish weighed six and a half pounds and best silver weighed one and three-quarters pounds. Can anyone top this?—*Storm Lake Pilot Tribune.*

WATERFOWL MAY LIVE SEVERAL DECADES

Waterfowl live much longer than upland game birds, the U. S. Fish and Wildlife Service states. In captivity, European geese and swans have lived 70 or 80 years, and ducks from 15 to 40 years. Wild ducks, geese and swans do not live as long, but wild banded ducks have been reported as old as 18 years, and geese and swans at least 20 years old.

PLANT BLACK WALNUTS

By M. A. Ellerhoff
Superintendent of Forestry

One of the most satisfactory and profitable trees that grow in Iowa is the American (black) walnut. Where walnut grows best it is the "cream of the crop." In planting walnuts it is strongly recommended, in most instances, to plant the nuts instead of the seedlings. Planting the nuts is simple, rapid and cheap.

When planting walnuts, one should avoid planting in pure plantations. They should be planted in a mixture with other hardwoods such as black locust, ash, oak, basswood or maple. The trees should be spaced at least ten feet apart. Another caution that should be considered is that, if possible, walnut should be planted where the topsoil is intact, as it grows best on deep, rich, porous soils.

Stratified nuts (stored over winter in damp sand) give the best results in planting. These stored nuts can be planted in the spring after the ground thaws out. When planting the nuts in heavy sod, one should strip the sod from an area of at least 15 inches square. Upon digging a hole two inches deep, one or two nuts may be planted in the hole, being sure afterward that sufficient dirt is tramped into the hole. For soft ground the nuts can be planted by pressing the nut into the ground with your heel, seeing that a little dirt is kicked over the nut and then firming with the heel.

Consider planting some black walnuts. No other native hardwood has served Iowa so well in times of war and peace. Stratified walnuts ready for spring planting may be secured at \$1.25 per 250 nuts from the State Conservation Commission.

Iowa lakes produced an average of about 1.0 fish per hour for Iowa anglers last year, as determined from the lakes creel census study.

IF YOUR DOG IS POISONED

By Ries Tuttle

It's not too likely that your dog is ever going to get poisoned, particularly if you're a city dweller and your pet is confined to a house or apartment.

But if your pet has a certain amount of freedom to barge about the yard or up and down the street, there is always the chance of his being exposed to poisons set out for rodents or dumped in a garbage can.

The dog's instinct will sometimes warn him against a poison, but not always; and some poisons are entirely odorless. The best thing is to know what to do in case your pet does accidentally pick up some deadly substance.

Instant treatment can usually avert death. Quick doses of specific antidotes and hypodermic injections can save a life if given immediately. But don't waste precious time taking your dog to a veterinarian unless he is close by. That will come later.

First, empty the dog's stomach by mixing equal parts of hydrogen peroxide (regular drug store strength of 3 per cent) and water and pouring it down the dog's throat. You should use a tablespoonful of liquid to each ten pounds the dog weighs—four table-spoons for a 40-pound dog, for instance.

This should make him vomit in about two minutes. If you don't have hydrogen peroxide on hand, warm salt water or mustard water given by mouth will stimulate vomiting.

Large forced draughts of milk or beaten white of egg are also good first aid remedies.

After the stomach settles, give the dog about a teaspoonful of Epsom salts in a little water. This will empty the intestines.

If it's at all possible to determine what poison your pet got, it will help in deciding what antidote to give. But you may have no way of knowing. Through the peroxide and Epsom salts you will already have taken steps against two poisons.

The first is an antidote for phosphorous, a frequent ingredient in rat poisons; the second, against lead poisoning. After you have used these, you can administer one tablespoon of "hypo" in water, which is an antidote for arsenic. Hypo, or sodium thiosulphate as it is called at the drug store, is the solution photographers use.

For food poisoning, the peroxide treatment should be supplemented with an enema of warm water before the Epsom salts are administered. If the pet has seized on one of the mercuric compounds, egg white beaten into half a cup of milk will act as an antidote. And for strychnine, give him a sedative drug such as nembutal or phenobarbital.

Dogs are peculiarly susceptible to strychnine which is present in a certain proportion of many laxatives for adult human use. The small quantity useful to humans can act as a poison to dogs, so it is wise never to administer human cathartics to dogs unless it is certain they do not contain strychnine.

Sometimes dogs will pick up and eat sedative drugs—pills that have fallen on the floor. The way to pull your pet out of effects of this is to give it a cup of strong coffee.

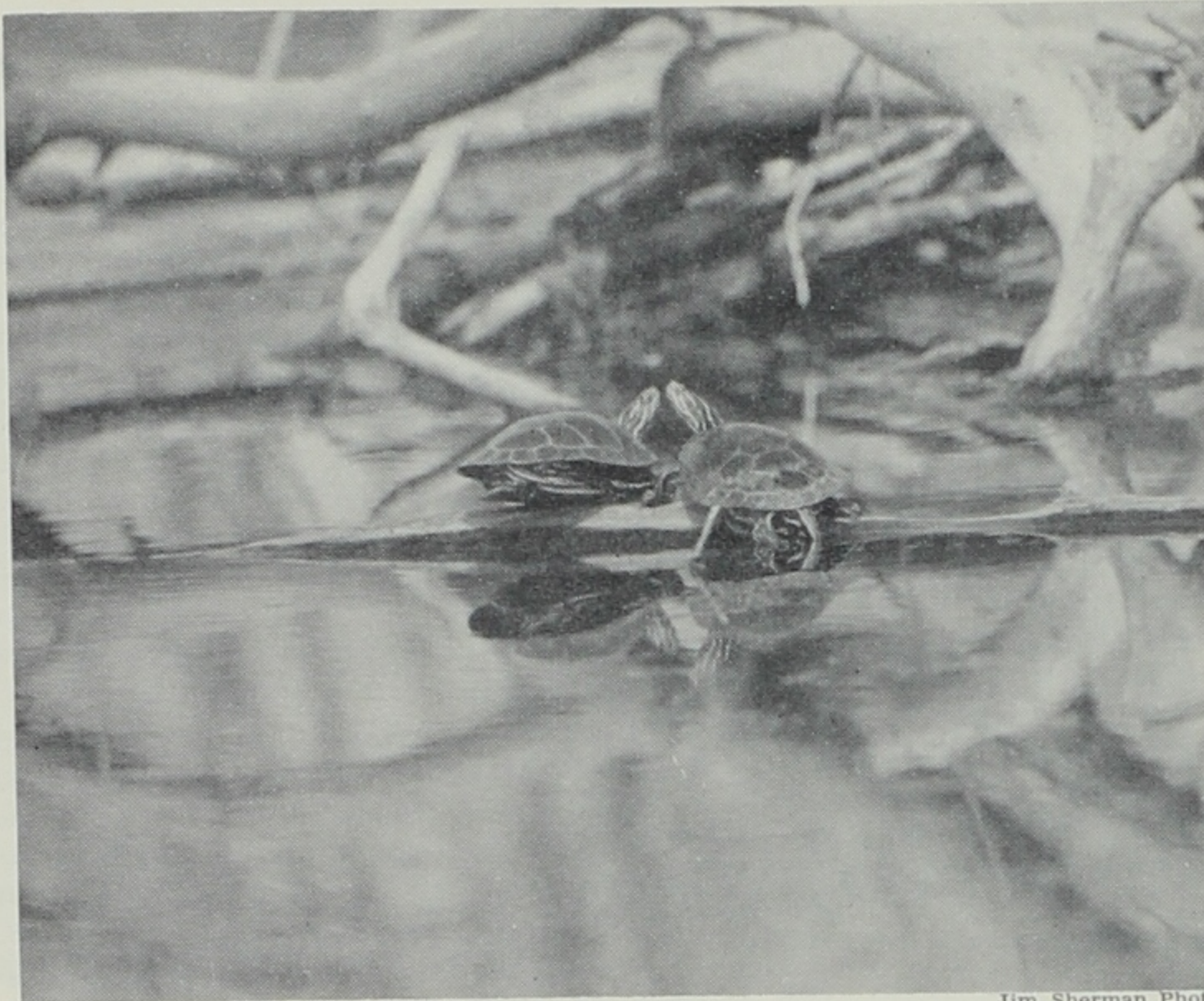
In all cases of poisoning, the veterinarian should be called immediately. He may not be satisfied that your treatment has been sufficient and may advise further steps.

But he will certainly commend your instant action, because promptness is as important as the treatment itself.—*Des Moines Tribune.*



Jim Sherman Photo.

If your pet has a certain amount of freedom, there is always a chance of his being exposed to poisons set out for rodents or dumped in the garbage can. The proper emergency treatment may save your dog's life.



These painted turtles will sleep away the winter months in a feather-bed of mud on the bottom of their pond. Jim Sherman Photo.

Animals . . .

(Continued from page 97)

of the winter, but will venture forth during mild periods. Their body temperatures remain higher than their surroundings.

In the northern and central United States toads, turtles and snakes become completely dormant, and the frogs and salamanders are divided in their behavior.

Insects usually hibernate in one form or another. Spiders, crustaceans, snails, clams and earthworms become dormant to some extent in winter.

Although numerous explanations have been given for hibernation, much remains to be learned and no one cause can be considered wholly responsible.

To get the most out of winter field trips, one must know where to look for the animals.

Raccoons use a hollow tree or log or the unused den of a woodchuck for a place to hole up. Bats prefer places where there is very little variation in temperature. This is usually found in fairly large caverns with small entrances.

Mice remain active all winter, as do moles and shrews. These small mammals occasionally run about on top of the snow but more frequently use runways under the snow.

A few birds winter in the woods. Grouse find shelter in evergreens, feed on buds of trees, evergreen ferns, berries and fruits and seeds. Crows and starlings congregate by thousands in pine forests or sheltered areas in the lee of a hill or grove. Jays and woodpeckers remain in the woods.

Some insects place their eggs and cocoons on the trunks and branches of trees. The majority find refuge lower down in the leaf litter, in the ground, or on plants near the ground.

Rotting logs and stumps make excellent winter cover for snails,

centipedes, salamanders, frogs, click beetles, adult fireflies, ground beetles, and flies.

The spring-tails, snails, beetle larvae, worms, spiders, myriapods, centipedes, and numerous other forms also move up and down in the leaf litter and soil below depending upon the temperatures. Some cocoons such as that of the luna moth are found among the leaves on the ground.

Woodchucks play a vital role in the lives of wintering animals. Their burrows serve not only as a place for the owners to hibernate, but also as homes and places of refuge for numerous other animals. Opossums and skunks take over these burrows when abandoned by the woodchuck. Rabbits and smaller rodents may use the dens for temporary shelter to escape dogs and foxes.

The fox spends most of his time in open areas because his main winter food supply—rabbits and mice—is found there. Follow his tracks from stump to stump or along the fences and you can observe his persistent efforts to find mice under the snow.

The weasel, too, lives on mice and other small animals and does his winter hunting in open areas. In the more northern areas his coat becomes pure white to match the snow.

Field mice remain active and even raise families during some of the winter months. One can easily find their nests and runways underneath the snow where grass grew tall in the summer. Shrews also use these runways under the snow.

Snakes seek underground chambers in which to hibernate. Frequently large numbers congregate in one place, wrapping themselves about each other. This is also true of earthworms.

Quail use thickets in open areas for shelter and form compact groups at night, which helps them to keep warm during severe weath-

er. They forage for weed seeds and unharvested grains in the daytime.

Whole communities of insects may spend the winter on plants which project through the snow. Look for thrips, egg cases of praying mantises and spiders, cocoons, and chrysalids of moths and butterflies on these taller plants.

Down among the grass roots or in the soil itself you will find ground beetles, weevils, lady beetles, ants, leaf-hoppers, aphid lions, and eggs of grasshoppers and crickets.

Plant lice, oyster scale, crab spiders, muscid flies, some beetles, and numerous other pests of the orchard find refuge on the bark of the trees or in the fruits, seeds or canes.

Buildings, bridges, woodpiles and fences offer places for mosquitoes, flies, wasps, bees, lady beetles, bats, squirrels, skunks, rats and mice to spend the winter.

In winter beavers and muskrats retire to their houses or burrows, coming out only when necessary to replenish their food supply. Otters feed along the freshwater streams. Other carnivores also remain active all winter.

Fish remain active or semi-active under the ice. Other animals in the ponds and streams migrate downward and outward beyond the frost lines. Land animals such as turtles, frogs, salamanders, snails and some insects and crustaceans burrow in the mud or hide in the silt on the bottom. Mussels dig deeper into the mud. Most aquatic insects stay active most of the winter.

Leeches burrow in the mud or

MULTIFLORA ROSE

The Bellevue Chapter of the Izaak Walton League at a recent directors' meeting went on record in favor of continuing their program of planting multiflora roses. Arthur Blitgen was named chairman of the rose program, and farmers wanting up to 50 bushes next spring will get them delivered to Bellevue at no cost. The local chapter is underwriting the initial cost of bushes and freight. The chapter does reserve the right to close its program at any time should there be an unusually large run on bushes. They invite farmers to try this new bush, or to add to their plantings. Kindly place your order with Arthur Blitgen. If any farmer should want more than 50 bushes he may order through Mr. Blitgen at chapter prices.

There are possibly 20 farmers in the Bellevue area that have planted these roses, all are enthusiastic about them. Mr. Blitgen's bushes when extended to their full length measure about 12 feet. This is a two years' growth.—Bellevue Leader.

creep beneath stones and rest throughout the winter. The freshwater and land crustaceans, sowbugs, fairy-shrimp, copepods, isopods and crayfish pass the winter as adults, eggs, or in immature stages.

Insects are represented in winter on land and in the water by every possible stage from eggs to adults. They may become dormant as fertilized eggs, larvae, pupae, or as adults.



The striped ground squirrel is a true hibernator. In a grass nest six feet underground its heartbeat, breathing and digestion almost stop, and its body takes on the temperature of the surrounding soil. Jim Sherman Photo.



During midday heat the timber rattler finds shelter from the sun under tree roots and in rock fissures.

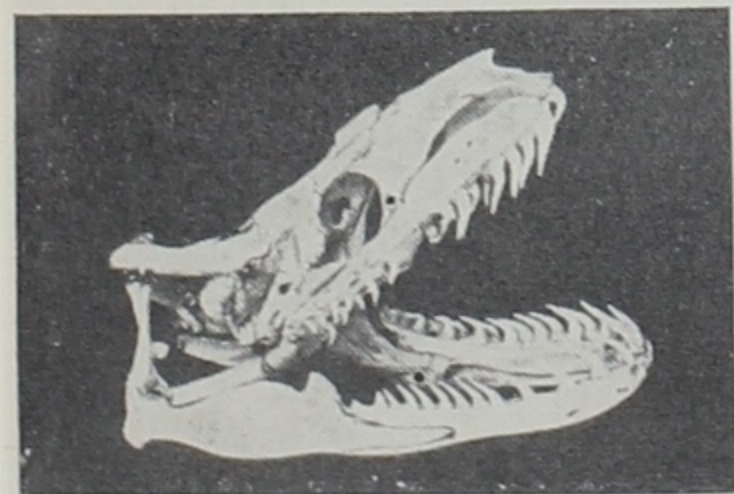
Snakes . . .

(Continued from page 97)

—at the front of the upper jaw. These fangs are connected at their base to a venom gland or sac. Normally the fangs are folded back against the roof of the mouth and hidden within a thin sheath of membrane. As the snake opens its jaws either in defense or to strike its food, the tips of these fangs spring downward and forward, ready for action. As the jaws begin to close, muscles force the venom from the poison glands and out through the hollow fangs. This action is entirely controlled by the snake, so that the venom is not expelled unless the snake so desires.

All of Iowa's poisonous snakes belong to the group called pit-vipers. That is, there is a pit or deep depression on each side of the head between the eye and the nostril. Our poisonous snakes also have characteristic flat, triangular heads that are much wider than the neck, and elliptical pupils which give a cat-like look to the eyes. All of them give birth to their young, rather than laying eggs as most snakes do. These characteristics, along with the fangs that are so infamous, serve to identify our poisonous snakes from the non-poisonous ones.

One or more of the four kinds of poisonous snakes have been recorded from 29 of the 99 Iowa counties. No poisonous snakes have been reported from the portion of the state bounded by Mar-



The jaws of the harmless snakes are lined with needle-sharp fixed teeth.

shall, Crawford, Osceola, and Worth counties.

Although the Copperhead was often rumored as present in Iowa, there was no actual proof until about 10 years ago. Since that time definite records have been established for it in three counties in the extreme southeastern corner of the state. These counties are Davis, Van Buren and Lee.

The lack of a rattle on the end of the tail is enough to distinguish the copperhead from the other poisonous snakes in Iowa. The top of the head is indeed copper-colored as the name implies, though this may vary from a bright copper to a dull copper in actual shade. The body is usually a pale or pinkish brown, with reddish-brown bands crossing the back. These bands are narrow at the top of the back and widen greatly on the sides, so that each band presents an hour-glass design. The average length of a copperhead is somewhat less than three feet, though some individuals in other states have grown to four feet and more.

Copperheads usually live in rocky areas near timber. Their food consists largely of mice, rats, young birds and, if water is nearby, of frogs.

Although a vicious and mean temperament is often considered a mark of all poisonous snakes, this is not very true in the case of the copperhead. More often than not copperheads will remain quiet and uncoiled when approached or will attempt to escape. When cornered they will strike with determination, either with or without first forming a coil.

The massasauga is a small edition of a rattlesnake. Mature adults average about two feet in length, with a maximum length of three feet.

The massasauga is greyish or brown in appearance, with three series of rounded blotches down the back and sides. The underparts are largely black in color. It can be told from the larger rattlesnakes by the presence of large scales or

plates on the top of the head, whereas all scales in this position on the other rattlesnakes are very small.

If a poisonous snake can be said to have a good disposition this would be true of the massasauga. It will usually make no effort to defend itself or to escape. If aroused it will strike viciously, however, and sound its rattle. Its diet consists of mice and frogs.

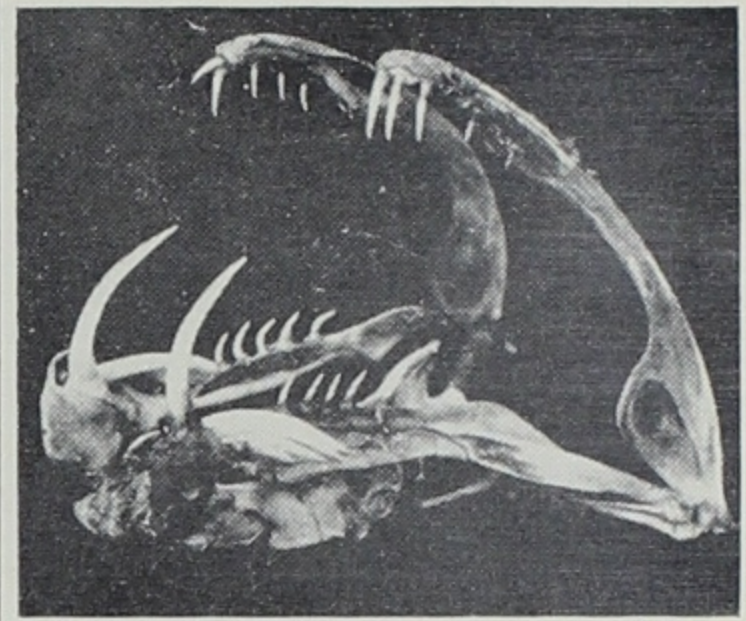
The venom of the massasauga is as poisonous as that of the larger rattlesnakes. However, because the snake is small and the fangs are one-fourth inch long or less, no person has ever died from the bite of a massasauga.

The massasauga has been found in 13 counties, all of them scattered in the southern and eastern thirds of the state.

The prairie rattlesnake is rare in Iowa, being recorded only from Plymouth and Woodbury counties in the northwestern corner of the state. It is more common in South Dakota just to the west of these counties.

The prairie rattlesnake is grayish to brown in general color, with a series of rectangular blotches on the back. It has been known to reach a length of six feet, though four feet is much nearer the average for mature individuals.

This rattler presents a truly vicious disposition in all of its contacts with man. If alarmed it coils



The jaws of the rattlesnake and other pit vipers are equipped with deadly hypodermic-like fangs.

rapidly and strongly, and strikes immediately without hesitation of any kind.

The timber rattlesnake is the most common of Iowa's poisonous snakes, occurring in 17 counties in south-central, southeastern and northeastern portions of the state.

The timber rattler is yellow-brown in color, with more or less complete dark bands crossing the body. It is mild-tempered, preferring to avoid detection by lying still or to escape to a nearby crevice in the rock. In spite of this mildness the timber rattlesnake must be considered as dangerously venomous, since a four and one-half foot specimen can inject a dosage of venom fatal to a grown man.

Timber rattlesnakes prefer rocky
(Continued on page 104)



The timber rattlesnake is the most common of Iowa's poisonous reptiles, occurring in 17 counties in south central, southeastern and northeastern portions of the state,



"There are buffalo roaming these midwest plains again, but their roaming is confined to a five-acre pasture."

BUFFALO ROAM IN IOWA AGAIN

Well, pardon my .45, but there are buffalos roaming these mid-west plains again.

It's not a picture reminiscent of the wild, wild west, however. The "buffalos" are two calves. Their "roaming" is confined to a five-acre pasture.

Instead of Indians and covered wagons for companions, they have ordinary, cud-chewing, domesticated cattle.

The two calves are the property of Julius Gerst, who farms near Burlington. The Gerst family saw a herd of buffalo while on a trip west a few weeks ago.

Gerst said an elderly man who was tending the animals near Cheyenne, Wyoming, explained he was raising them to sell. The tameness of the animals appealed to the Gersts, but they didn't buy.

After they had returned home, however, they decided to go back and get the buffalos, Gerst said. With the help of his two sons, Adolph and Ernst, Gerst built a two-wheel trailer in which they hauled the calves back to Iowa. They sold for a little more than cattle, Gerst said.

"They are tame except when cornered," Gerst said. "Then they are likely to demonstrate that they can run faster than cattle and jump any fence."

The calves are named Buffalo Bill and Martha after the famed William Cody and his wife. They weigh about 450 pounds. They were born last May and are not expected to reach full growth for three years.

The animals, with their shaggy manes and heavy forequarters, have attracted considerable attention in the pasture. Motorists passing on highway 99 have paused to look at them.

They eat and drink with the cattle, Gerst said. He said they were being fed ground corn and oats in addition to pasture grass. The two are almost inseparable, Gerst related.

The animals are a little shy of strangers, but Gerst says they will permit members of the family to pet them in the barn or lot. Asked what he planned to do with the buffalos, Gerst replied, "We'll just wait and see what they will do."

—*Sioux City Journal*.

CUT POLLUTION OF STORM LAKE

As a cooperative move to reduce pollution in Storm Lake, the Iowa Conservation Commission has contracted to turn over to the city of Storm Lake 1.8 acres of ground for use as a lime bed, Mayor Oscar Grau revealed Monday night at a regular meeting of the city council.

The odd-shaped plot of land is located across the road west of the city water plant. It will be used by the city as an emergency bed for lime when the regular lime pits at the plant are full.

In the past, lack of a place to dispose of excess lime has sometimes resulted in an overflow of lime residue into the lake. Conservation and city officials recently conferred and worked out the solution to the problem.—*Storm Lake Register*.

1950 Hunting . . .

(Continued from page 97)

better, 77 counties; poorer, 11; the same, 10.

After a low of several years, rabbit hunting improved in 1949 and continues to show a very definite improvement this year. The questionnaires reveal good hunting in 36 counties, fair in 56, poor in six. Compared to 1949, better in 86 counties, poorer in eight, the same in five.

Quail hunting definitely improved over the previous year; however, the number of counties in which the conservation officers considered quail hunting good numbered only 13, fair in 21, poor in 14. Compared to 1949, quail shooting was better in 33 counties, poorer in 13, and the same in one.

THE "RIFLES" IN RIFLES

Sportsmen, particularly those who are newcomers to the sport of shooting, frequently ask the questions, "Why is the barrel of a rifle 'rifled' or grooved? What is meant by 'twist'?"

The answers are simple enough to the experienced shooter. But because the rifles in a gun barrel are not easily observed their importance to satisfactory performance is sometimes not fully understood by the novice. "Superior and accurate results of bullet flight depend in a large measure upon rifling," says Remington Arms Company, Inc.

It is not necessary or proper to "rifle" shotgun barrels because the shot charge is made up of a larger number of pellets and rotation is not needed. But a rifle barrel accommodates only one bullet at a time and that bullet must rotate if it is to travel accurately.

In rifle barrel manufacture, the drilling operation is followed by reaming to exact bore diameter. Rifling grooves are then cut in a helical manner . . . there usually are four or six such grooves, the depth being three or four thousandths of an inch. When a cartridge is fired, the bullet enters the barrel from its case which rests in the chamber, and is forced into the lands and grooves of the rifling, forming a gas seal and causing the bullet to rotate.

This rifling causes the bullet to spin in its course of flight and thereby the projectile attains stability and accuracy. The principle is gyroscopic and similar to that of a spinning top. When the top is rotating rapidly it stands up. When it slows down, it begins to wobble. Spinning rapidly the bullet travels accurately.

"Twist" refers to the turn in rifling. The rate of "twist" for any given caliber is determined by velocity and by the relation of the

diameter of the bullet to its length. A long, thin bullet must spin rapidly to remain stable in flight and "twist" is, therefore, fast. A short, heavy bullet need not spin as rapidly and "twist" is, therefore, slower.

Snakes . . .

(Continued from page 103)

places in timbered regions where there is an abundance of caves and crevices for their winter dens, and an abundance of rabbits, squirrels, rats, mice and birds that make up its food. The same hibernating dens seem to be used year after year, the snakes making their way in some instinctive fashion from the surrounding timber and rocky areas. On the main ledges outside the den numbers of these snakes can be found curled up in the sun on warm days of "Indian summer." A visit to such a den is apt to give the impression that rattlesnakes are exceedingly numerous. After a few days the snakes disappear into the crevice for the winter. In the spring the snakes again spend several days near the entrance of the dens before scattering into the nearby timber for the summer.

The flesh of rattlesnakes is considered good to eat by some people. It is reported to "taste just like chicken."

GAME IN TOWN

From a hill close to Marshalltown you could toss a snowball (if you made a real hefty heave of the sphere) right across the city limit line. Then by standing on this same spot you could see, if you looked real close, a beautiful covey of quail, at least a dozen pheasants, and plenty of deer and rabbit tracks.—*Marshalltown Times-Republican*.

Glochidia of most clams must become attached to the fins or gills of a fish and live as parasites until they have developed into young clams.



Grooves in a rifle barrel cause the bullet to spin in flight, giving present day rifle shooters great accuracy with modern firearms.

Jim Sherman Photo.